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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,380	01/28/2004	Ashwin J. Mathew	03226.443001;SUN030034	4747
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OSHA LIANG L.L.P./SUN 1221 MCKINNEY, SUITE 2800 HOUSTON, TX 77010			EXAMINER KIM, PAUL	
			ART UNIT 2161	PAPER NUMBER
			NOTIFICATION DATE 11/20/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/767,380

Applicant(s)

MATHEW ET AL.

Examiner

Paul Kim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 and 32-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 32-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/7/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office action is responsive to the following communication: Request for Continued Examination filed on 4 September 2007.
2. Claims 1-19 and 32-42 are pending and present for examination.

Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4 September 2007 has been entered.

Response to Amendment

4. Claims 1-7, 12-16, and 32-38 have been amended.
5. No claims have been further cancelled.
6. No claims have been further added.

Information Disclosure Statement

7. The information disclosure statement (IDS) submitted on 7 September 2007 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 1, 3, 5-10, 12, 14, 16-18, 32, 34, and 36-41** are rejected under 35 U.S.C. 103(a) as being unpatentable over Cazemier et al (U.S. Patent No. 6,609,123, hereinafter referred to as CAZEMIER), filed on 1 September 2000, and issued on 19 August 2003, in view of Blankesteyn (USPGPUB No. 2002/0165724, hereinafter referred to as BLANKESTEIJN), filed on 23 February 2001, and published on 7 November 2002.

10. **As per independent claims 1, 12, and 32**, CAZEMIER, in combination with BLANKESTEIJN, discloses:

An automated method of updating data within a peer-to-peer enterprise information system comprising:

publishing a data change from a first source system over a broadcast channel, wherein said data change is of a first data type {See BLANKESTEIJN, [0164], wherein this reads over "alternatively placing the data change objects into a data space (e.g., a queue) to be transmitted by the publish interface. If a data change object is to be published/pushed to a client, the control passes to step 156 and the data change object 157 is transmitted to the appropriate client(s)"};

in response to said data change, a join engine peer accessing a global attribute object model to identify a second data type and additional attributes of said second data type {See CAZEMIER, C6:L1-7, wherein this reads over "a rich business-oriented metadata model 15 that allows the query engine 30 to generate the best queries"; and C7:L25-42, wherein this reads over "[u]sing the information that is built in the metadata model 15, the query engine 30 makes the specification 35 unambiguous and builds a query in terms of the data access layer 102 for the specification"};

wherein said global attribute object model defines a dependency between said additional attributes and attributes of a third data type {See CAZEMIER, C9:L14:L39, wherein this reads over "an attribute may be expressed as a calculation based on other attributes, constants and columns" and "[a] reference join indicates that one entity acts as a lookup table with respect to the other"; and C9:L51-60, wherein this reads over "an entity may inherit information from another entity using a technique called subtyping"};

using a query to obtain said additional attributes from a second source system, wherein said query is generated using said global attribute object model {See CAZEMIER, C3:L56-60, wherein this reads over "[t]he query engine also comprises a query engine component for translating the query specification into a data source query which is applicable to the data sources, based on model objects in the metadata model"; and C7:L11-24, wherein this reads over "generating a query that can be executed against the underlining data sources, e.g., a relational database"};

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generating a modified attribute set comprising said additional attributes and said data change {See BLANKESTEIJN, [0071], wherein this reads over "[t]he net change server 18 collects the changes (bundled as transaction units) passed through the Audit Trail API 14, reads supplemental information regarding the changes from related data 20 that (if needed), builds a one or more data change objects based upon the collected changes, and performs any desired/required transformations upon the data change objects"}; and

publishing said modified attribute set to a third source system, wherein said third source system is associated with said third data type {See BLANKESTEIJN, [0095], wherein this reads over "the publish/subscribe notification mechanism 122 broadcasts changes to the applications that subscribe to particular changes"; and [0164], wherein this reads over "alternatively placing the data change objects into a data space (e.g., a queue) to be transmitted by the publish interface. If a data change object is to be published/pushed to a client, the control passes to step 156 and the data change object 157 is transmitted to the appropriate client(s)"}.

While CAZEMIER may fail to expressly disclose a method wherein data changes are published within a peer-to-peer enterprise information system, BLANKESTEIJN discloses a method wherein data change objects are published to clients across a network. Additionally, it is noted that the disclosed invention found in both CAZEMIER and BLANKESTEIJN are directed to the processing of data changes within a data model or object. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the invention as suggested by CAZEMIER and BLANKESTEIJN.

One of ordinary skill in the art would have been motivated to do this modification so that data may be consolidated and synchronized from various related sources by publishing data changes, and having a join query engine generate queries to retrieve attributes of data types in response to said data changes.

11. **As per dependent claims 3, 14 and 34, CAZEMIER, in combination with BLANKESTEIN,** discloses:

A method as described in Claim 1 wherein said data change includes at least one changed attribute and all other attributes of said first data type {See BLANKESTEIJN, [0043], wherein this reads over "the changes are transmitted to the end user application – unchanged data is not transmitted to the end user unless requested or needed to fulfill a configured specification"}.

12. **As per dependent claims 5, 16 and 36, CAZEMIER, in combination with BLANKESTEIN:**

A method as described in Claim 1 wherein said global attribute object model maps dependencies between attributes of said third data type and attributes of said first data type {See CAZEMIER, C9:L14:L39, wherein this reads over "an attribute may be expressed as a calculation based on other attributes, constants and columns" and "[a] reference join indicates that one

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entity acts as a lookup table with respect to the other"; and C9:L51-60, wherein this reads over "an entity may inherit information from another entity using a technique called subtyping").

13. **As per dependent claims 6 and 37**, it would inherent for the method of forming a modified attribute.set to comprise performing a data transformation since the creation or modification of the modified attribute set would necessitate in the transformation of data.

14. **As per dependent claims 7 and 38**, it would inherent for the method of forming a modified attribute set to further comprise performing a data transformation for the published data change since the insertion of the published data change into the modified attribute set would necessitate in the transformation of data.

15. **As per dependent claims 8 and 39**, CAZEMIER, in combination with BLANKESTEIN:

A method as described in Claim 7 wherein said performing a data transformation is by said join engine peer {See CAZEMIER, C17:L47-55, wherein this reads over "[t]he table extract construction transformation 112c then attempts to determine a relationship between data access layer tables 122 based on the extended record identifiers"}.

16. **As per dependent claims 9, 17 and 40**, CAZEMIER, in combination with BLANKESTEIN:

A method as described in Claim 8 wherein said performing a data transformation comprises automatically transforming said data change into a transformation script of a transformation language for implementation by said join engine peer {See CAZEMIER, C16:L20-23, wherein this reads over "the table extract constructing transformation 112c, using SQL statements 124, constructs query specifications 126 that reference data access layer tables 122 and other data access model objects"; and C16:L24-31, wherein this reads over "the table extract constructing transformation 112c builds a corresponding query specification query 126 in terms of data access layer tables 122 and columns}.

17. **As per dependent claims 10, 18 and 41**, CAZEMIER, in combination with BLANKESTEIN:

A method as described in Claim 9 wherein said transformation language is compliant with XSLT syntax {See BLANKESTEIJN, [0121], wherein this reads over "the data change objects are defined by XML tagged entries defining the various fields of the data change objects"}.

18. **Claims 2, 4, 11, 13, 15, 19, 33, 35, and 42** are rejected under 35 U.S.C. 103(a) as being unpatentable over CAZEMIER, in view of BLANKESTEIJN, as applied to claims 1, 3-10, 12, 14, 16-18 above, and in further view of Official Notice.

19. **As per dependent claims 2, 13, and 33**, the Examiner takes Official Notice that it would have been obvious to one of ordinary skill in the art for the broadcast channel to be associated with an adapter

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peer for a source system for the source data type since it would be necessary to utilize the broadcast channel in effectively publishing the data change in the peer-to-peer enterprise information system.

20. **As per dependent claims 4, 15, and 35**, the Examiner takes Official Notice that it would have been obvious to one of ordinary skill in the art to form the modified attribute set directly from the published data change when all the additional attributes are contained within the source data type since there would be no need to further access other sources for additional attributes.

21. **As per dependent claims 11, 19, and 42**, the Examiner takes Official Notice that it would have been obvious to one of ordinary skill in the art to use transformation language which is compliant with JAVA language syntax since it would have been widely known within the art at the time the invention was made.

Response to Arguments

22. Applicant's arguments with respect to claims 1, 3-10, 12, 14, 16-18, 32, 34, and 36-41 have been considered but are moot in view of the new ground(s) of rejection.

23. Applicant's arguments with respect to claims 2, 4, 10-11, 13, 15, 19, 33, 35 and 42 have been fully considered but are moot in view of the new ground(s) of rejection.

Conclusion


24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Kim whose telephone number is (571) 272-2737. The examiner can normally be reached on M-F, 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Apu Mofiz can be reached on (571) 272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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